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## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): Schreiber et al.

Serial Jo.: 08/922,240

Filing Late: August 27, 1997

Title: Gene Therapy by Cell Specific Targeting

Examiner: Sorbello, E.

Group Art Unit: 1633

Atty. Docket No: APV-007.01

Assistant Commissioner for Patents Washington, DC 20231

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I hereby certify that this correspondence is being deposited with the U.S. Postal Service as first class mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, DC 20231, on the date indicated below:

October 24, 2001

Date of Signature and Mail Deposit

Mattha Vinca

## RESPONSE AND AMENDMENT

Dear Sir:

Applicants submit this Response and Amendment in response to the Office Action dated 24 April 2001. A Petition for a three-months extension of time and appropriate fees are filed concurrently herewith.

## In the claims:

Please amend the claims as follows:



- 1. **(Twice Amended)** A method for inhibiting activation of a T cell, wherein the T cell or a progenitor cell thereof was engineered *ex vivo* to express a gene encoding a mutated macrolide binding protein (MBP), which method comprises contacting the cell with a macrolide which induces macrolide-dependent inhibition of activation of the T cell in a manner dependent on the expression of the mutated MBP.
- 2. (Twice Amended) A method for inhibiting transcription of an NF-AT dependent gene in a T cell, wherein the T cell or a progenitor cell thereof was engineered ex vivo to express an MBP gene encoding a mutated macrolide binding protein (MBP) which method comprises contacting the T cell with a macrolide which selectively binds to the altered MBP relative to the wild-type MBP and induces macrolide-dependent inhibition of transcription of NF-AT dependent gene in the T cell in a manner dependent on the expression of the mutated MBP.
- 6. (Twice Amended) The method of claim 1 or 2, wherein the MBP gene was introduced into the cell ex vivo by DNA transfection.